

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) ~~A projection~~ An exposure apparatus ~~that supplies liquid in a space between a projection optical system and a substrate and transfers a pattern on said substrate via said projection optical system and said liquid, said apparatus comprising:~~

a substrate table ~~on which a substrate is mounted that can be moved~~ that is movable while holding said a substrate;

an optical member that forms a pattern onto the substrate on the substrate table through a liquid which partially fills a space between the optical member and the substrate;
and

~~a correction unit~~ correcting device that corrects a positional deviation occurring in at least one of ~~said~~ the substrate on the substrate table and ~~said~~ the substrate table table, the positional deviation being caused by ~~due to~~ supply of said ~~the liquid~~ liquid.

2. (Currently Amended) The ~~projection~~ exposure apparatus of Claim 1, ~~said~~ the apparatus further comprising:

a position measuring ~~system~~ device that ~~measures~~ obtains positional information of ~~said~~ the substrate table, wherein

~~said~~ the ~~correction unit~~ correcting device corrects a positional deviation occurring in at least one of ~~said~~ the substrate and ~~said~~ the substrate table ~~due to supply of said liquid~~ according to the position of said ~~the~~ substrate table ~~measured~~ which is obtained by said ~~the~~ position measuring system device.

3. (Currently Amended) The ~~projection~~ exposure apparatus of ~~Claim 2~~ Claims 2, wherein

~~said the correction unit~~correcting device corrects an error in ~~said the~~ positional information in at least one of ~~said the~~ substrate and ~~said the~~ substrate table ~~measured-obtained~~ directly or indirectly by ~~said the~~ position measuring ~~system~~device, which occurs due to supply of ~~said the~~ liquid.

4. (Currently Amended) The ~~projection~~ exposure apparatus of ~~Claim 1~~Claim 1, wherein

~~said the correction unit~~correcting device corrects a positional deviation that occurs by a change in the shape of ~~said the~~ substrate table.

5. (Currently Amended) The ~~projection~~ exposure apparatus of ~~Claim 1~~Claim 1, wherein

~~said the~~ substrate table has a fiducial member used for position setting, and ~~said the correction unit~~correcting device corrects a positional deviation between ~~said the~~ fiducial member and ~~said the~~ substrate.

6. (Currently Amended) The ~~projection~~ exposure apparatus of ~~Claim 1~~Claim 1, wherein

~~said the correction unit~~correcting device corrects the distance between ~~said projection-optical system~~the optical member and ~~said the~~ substrate in an optical axis direction of ~~said projection-optical system~~the optical member.

7. (Currently Amended) The ~~projection~~ exposure apparatus of ~~Claim 1~~Claim 1, wherein

~~said correction unit~~the correcting device corrects ~~said the~~ positional deviation according to a physical quantity related to ~~said the~~ liquid.

8. (Currently Amended) The ~~projection~~ exposure apparatus of ~~Claim 7~~Claim 7, wherein

~~said~~the physical quantity related to ~~said~~the liquid includes at least one of pressure of ~~said~~the liquid and surface tension of ~~said~~the liquid.

9. (Currently Amended) The ~~projection~~-exposure apparatus of ~~Claim 1~~Claim 1, wherein

~~said~~the ~~correction unit~~correcting device corrects a positional deviation that occurs by vibration of ~~said~~the substrate table.

10. (Currently Amended) The ~~projection~~-exposure apparatus of Claim 1, ~~said~~the apparatus further comprising:

a mask stage on which a mask having ~~said~~the pattern formed is mounted that can be moved holding ~~said~~the mask; and

~~said~~the ~~correction unit~~correcting device corrects ~~said~~the positional deviation by changing a thrust given to at least one of ~~said~~the substrate table and ~~said~~the mask stage.

11. (Currently Amended) The ~~projection~~ exposure apparatus of ~~Claim 10~~Claim 10, wherein

~~said~~the ~~correction unit~~correcting device comprises a controller that changes ~~said~~the thrust by feedforward control.

12. (Currently Amended) The ~~projection~~-exposure apparatus of ~~Claim 1~~Claim 1, wherein

~~said~~the ~~correction unit~~correcting device corrects ~~said~~the positional deviation based on position ~~measuring-obtaining~~ results of a transferred image of ~~said~~the pattern transferred on ~~said~~the substrate.

13. (Currently Amended) The ~~projection~~-exposure apparatus of ~~Claim 1~~Claim 1, wherein

~~said~~ ~~correction unit~~the correcting device corrects ~~said~~the positional deviation based on simulation results.

14. (Currently Amended) A stage ~~unit device~~ that has a substrate table which movably holds a substrate whose surface is supplied with a liquid, ~~said unit~~the device comprising:

a position measuring ~~unit device~~ that ~~measures~~obtains positional information of ~~said~~the substrate table; and

a ~~correction unit~~correcting device that corrects a positional deviation occurring in at least one of ~~said~~the substrate on the substrate table and ~~said~~the substrate table, the positional deviation being caused by ~~due to~~ supply of ~~said~~the liquid, wherein

an immersion area is defined by an area where the liquid is located, and the immersion area is smaller than the surface of the substrate on the substrate table.

15. (Currently Amended) The stage ~~unit device~~ of ~~Claim 14~~Claim 14, wherein ~~said~~the ~~correction unit~~correcting device corrects a positional deviation that occurs by a change in the shape of ~~said~~the substrate table.

16. (Currently Amended) The stage ~~unit device~~ of ~~Claim 14~~Claim 14, wherein ~~said~~the substrate table has a fiducial member used for position setting, and ~~said~~the ~~correction unit~~correcting device corrects positional deviation between ~~said~~the fiducial member and ~~said~~the substrate.

17. (Currently Amended) An exposure method ~~in which liquid is supplied to a space between a projection optical system and a substrate held on a substrate table and a pattern is transferred onto said substrate via said projection optical system and said liquid which forms a pattern onto a substrate held by a substrate table, said~~the method comprising:

~~a detection process in which~~detecting a change ~~occurring that occurs~~ in at least one of ~~said~~the substrate and ~~said~~the substrate table ~~due to~~caused by supply of ~~said~~a liquid is detected; and

~~a transfer process in which said pattern is transferred onto said substrate based on results of said detection.~~ forming the pattern onto the substrate based on results of the detecting a change, by irradiating a radiation beam through an optical member and the liquid which partially fills a space between the optical member and the substrate on the substrate table.

18. (Currently Amended) The exposure method of ~~Claim 17~~ Claim 17, wherein ~~in said transfer process, said transfer~~ the forming the pattern is performed with at least one of a positional deviation that occurs by a change in the shape of said the substrate table and the distance between said projection optical system the optical member and said the substrate in an optical axis direction of said projection optical system the optical member corrected.

19. (Currently Amended) The exposure method of ~~Claim 17~~ Claim 17, wherein ~~in said detection process, the detecting a change detects~~ a change according to a physical quantity related to ~~said the liquid is detected~~, and ~~in said transfer process, said transfer~~ the forming the pattern is performed with ~~said the~~ change according to ~~said the~~ physical quantity related to ~~said the~~ liquid corrected.

20. (Currently Amended) The exposure method of ~~Claim 19~~ Claim 19, wherein ~~said the~~ physical quantity related to ~~said the~~ liquid includes at least one of pressure of ~~said the~~ liquid and surface tension of ~~said the~~ liquid.

21. (Currently Amended) The exposure method of ~~Claim 17~~ Claim 17, wherein ~~in said transfer process, said transfer~~ the forming the pattern is performed with a positional deviation that occurs by vibration of said the substrate table corrected.

22. (Currently Amended) The exposure method of ~~Claim 17~~ Claim 17, wherein

in ~~said transfer process, said transfer~~ the forming the pattern is performed with ~~said the~~ change corrected by changing a thrust given to at least one of ~~said the~~ substrate table and a mask stage on which a mask where ~~said the~~ pattern is formed is mounted.

23. (Currently Amended) The exposure method of ~~Claim 22~~ Claim 22, wherein the change of ~~said the~~ thrust is performed by feedforward control.

24. (Currently Amended) The exposure method of ~~Claim 17~~ Claim 17, wherein ~~said the~~ change is corrected based on position ~~measuring~~ obtaining results of a transferred image of ~~said the~~ pattern transferred on ~~said the~~ substrate.

25. (Currently Amended) The exposure method of ~~Claim 17~~ Claim 17, wherein ~~said the~~ change is corrected based on simulation results.

26. (Currently Amended) The ~~projection~~ exposure apparatus of ~~Claim 1~~ Claim 1, wherein

supply of ~~said the~~ liquid in ~~said the~~ space between ~~said projection optical system the optical member~~ and ~~said the~~ substrate is performed by a liquid supply ~~unit device~~, and

~~said the~~ liquid supply ~~unit device~~ supplies the liquid to a part of ~~said the~~ substrate.

27. (Currently Amended) The ~~projection~~ exposure apparatus of ~~Claim 1~~ Claim 1, wherein

~~said the~~ substrate table has a holding member that holds ~~said the~~ substrate and plate members arranged in the periphery of ~~said the~~ holding member.

28. (Currently Amended) The ~~projection~~ exposure apparatus of ~~Claim 2~~ Claim 2, wherein

~~said the~~ position measuring ~~system device~~ measures obtains positional information of ~~said the~~ substrate table without involving ~~said the~~ liquid.

29. (Currently Amended) The stage ~~unit device~~ of ~~Claim 14~~ Claim 14, wherein supply of ~~said the~~ liquid to ~~said the~~ substrate is performed by ~~said a~~ liquid supply ~~unit device~~, and
- ~~said the~~ liquid supply ~~unit device~~ supplies liquid to a part of ~~said the~~ substrate.
30. (Currently Amended) The stage ~~unit device~~ of ~~Claim 14~~ Claim 14, wherein ~~said the~~ substrate table has a holding member that holds ~~said the~~ substrate and plate members arranged in the periphery of ~~said the~~ holding member.
31. (Currently Amended) The stage ~~unit device~~ of ~~Claim 14~~ Claim 14, wherein ~~said the~~ position measuring ~~system device~~ ~~measures obtains~~ positional information of ~~said the~~ substrate table without involving ~~said the~~ liquid.
32. (Currently Amended) The exposure method of ~~Claim 17~~ Claim 17, wherein ~~said the~~ liquid is supplied to a part of ~~said the~~ substrate.
33. (Currently Amended) The exposure method of ~~Claim 17~~ Claim 17, wherein on ~~said the~~ substrate table, plate members are arranged in the periphery of a holding member that holds ~~said the~~ substrate.
- 34 (New) The exposure apparatus of Claim 1, wherein
- an immersion area is defined by an area where the liquid is located and the immersion area is smaller than a surface of the substrate held by the substrate table.
35. (New) The exposure apparatus of Claim 34, wherein
- the immersion area is movable on the surface of the substrate in accordance with the movement of the substrate table.
36. (New) The stage device of Claim 14, wherein
- the immersion area is movable on the surface of the substrate in accordance with the movement of the substrate table.
37. (New) The exposure apparatus of Claim 17, wherein

an immersion area is defined by an area where the liquid is located and the immersion area is smaller than a surface of the substrate held by the substrate table.

38. (New) The exposure method of Claim 37, wherein
the immersion area is movable on the surface of the substrate in accordance with the movement of the substrate table.

39. (New) A stage device comprising:
a table that is movable while holding an object whose surface is supplied with a liquid, wherein an immersion area where the liquid is located is smaller than the surface of the object held by the table;

a position measuring device that obtains positional information of the table;
and

a control device that obtains a positional deviation related to the positional information of the table obtained by the position measuring device, the positional deviation being caused by supply of the liquid.

40. (New) The stage device of Claim 39, wherein
the control device obtains the positional deviation according to a property of the liquid.

41. (New) The stage device of Claim 40, wherein
the property includes at least one of pressure of the liquid, surface tension of the liquid, a flow of the liquid, and a contact angle of the liquid.

42. (New) The stage device of Claim 40, further comprising:
a memory that stores a relation between the property and the positional deviation.

43. (New) The stage device of Claim 39, wherein
the table has a fiducial member used for position setting of the table, and

the control device obtains a positional deviation between the fiducial member and the object held by the table.

44. (New) An exposure apparatus comprising:
a stage device according to Claim 39, wherein the object is a substrate; and
an optical member that forms a predetermined pattern on the substrate.